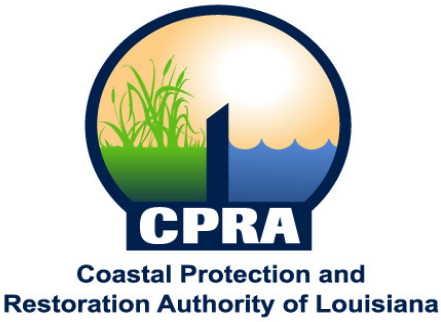


Coastal Protection and Restoration Authority of Louisiana

Office of Coastal Protection and Restoration

2011 Annual Inspection Report

Barataria Bay Waterway West Bank Protection

State Project Number BA-23
Priority Project List 4

June 23, 2011
Jefferson Parish

Prepared by:

Barry Richard, P.E.
CPRA/ Office of Coastal Protection and Restoration
New Orleans District
CERM, Suite 309
2045 Lakeshore Dr.
New Orleans, La 70122

Table of Contents

Appendices

I. Introduction

The Barataria Bay Waterway West Bank Protection Project (BA-23) is located in Jefferson Parish, Louisiana approximately 4.5 mi (7.2 km) south of Lafitte on the west side of the Dupre Cut portion of the Barataria Bay Waterway (BBW). The project area is east of Bayou Rigolettes, north of the Lafitte Oil and Gas Field, and southwest of The Pen (Appendix A).

II. Project Description and History

Project area wetlands were formed in a protective curve of the natural ridge of Bayou Barataria. The east-west orientation of the ridge, which serves as the southern boundary of the project area, protected the wetlands from the direct influence of salinities and tidal action of the Gulf of Mexico through Barataria Bay. Construction of the Dupre Cut portion of BBW established a direct conduit linking project wetlands with Barataria Bay. Initially, Dupre Cut spoil banks protected the project area from salinity and tidal fluctuations in the waterway. The combination of subsidence and wave erosion from marine traffic, however, has caused a breaching of the spoil banks which has resulted in increased water exchange and salinity fluctuations.

Principal project components include:

1. Foreshore Rock Dike
    - 9,900 linear feet (2,865 m) of rock shoreline protection along the west bank of the BBW.
2. Water Control Structure
    - Two (2) 48 inch diameter culverts.
    - Four (4) 5 ft long stop log bays capable of holding 10 stop logs each.

The purpose of the foreshore rock dike is to protect the existing adjacent marsh from excessive water exchange, wave action, and subsequent erosion. The structure also protects newly created marsh which was constructed as a beneficial use project during the U.S. Army Corps of Engineers' (USACE) maintenance dredging of the BBW. This marsh was created by beneficially placing approximately 750,000 cubic yards of dredge material from the Waterway in shallow open water areas adjacent to the BBW. Gaps in the spoil bank excluded from the USACE dredging operation were filled in, thereupon reinforcing and forming a continuous structure.

The purpose of the water control structure, which is located at the end of an abandoned oil well access canal, is to allow the water levels in the new and existing marsh to be managed. The structure remains open most of the year, allowing unimpeded ingress and egress of marine organisms. During waterfowl hunting season, which is also low water season, (November through January) the structure is closed to retain water within the

southern project area. Water levels are managed to a height not to exceed 6 inches (15 cm) below marsh elevation in the southern project area.

Project construction began on June 9, 2000, and was completed on November 7, 2000. Project life is estimated to be 20 years. Annual project inspections are planned.

In December, 2005, a contract to raise these structures was awarded and resulted in the placement of 5,143 tons of rock riprap on the settled sections of the structure. The work was completed on January 24, 2006

In May, 2007, a contract for dredging the access channel which leads to the water control structure was awarded. Approximately 4,400 cubic yards of material was dredged and placed within the channel to be used beneficially. This work was completed on June 19, 2007.

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Barataria Bay Waterway West Bank Protection Project (BA-23) is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, the OCPR shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan March 18, 2002). The annual inspection report also contains a summary of maintenance projects and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A summary of past operation and maintenance projects completed since completion of the project are outlined in Section II.

An inspection of the Barataria Bay Waterway West Bank Protection Project (BA-23) was held on April 21, 2011, by Barry Richard of OCPR and Quin Kinler and Mike Trusclair of NRCS. Photographs of that inspection are included in Appendix B of this report.

IV. Inspection Results

Rock Riprap

The rock structure appeared to be in good condition at the time of the inspection (Photo #2). There are some sections of settlement, but the structure is still functioning as designed. These sections will continue to be monitored for maintenance needs.

Water Control Structure

The structure was opened for the first time since the oil spill on March 23, 2011. Everything is still in good condition. Some of the stop logs need repairs and the slots need to be cleaned, but no major repairs are required at this time. The landowner has informed me that the test well that was drilled was successful and a more permanent structure will be placed at the mouth of the canal, to one side. The access dredging they did disturbed little of the 2007 maintenance marsh creation inside the channel. The marsh that their dredging created within the project appears to be a little low in spots but overall looks good (Photo #1).

V. Conclusions

The Barataria Bay Waterway West Bank Protection Project (BA-23) is performing as intended. The rock dike is protecting the existing marsh as designed, and the dredge material which the USACE placed inside of the project area has set up and vegetated nicely. The last maintenance lift raised the elevation of the settled sections of foreshore rock dike back to the original designed elevation. This should ensure that the structure performs adequately through the next programmed maintenance lift.

VI. Recommendations

There are no recommendations at this time.

Immediate Repairs

- There are no immediate repairs scheduled at this time.

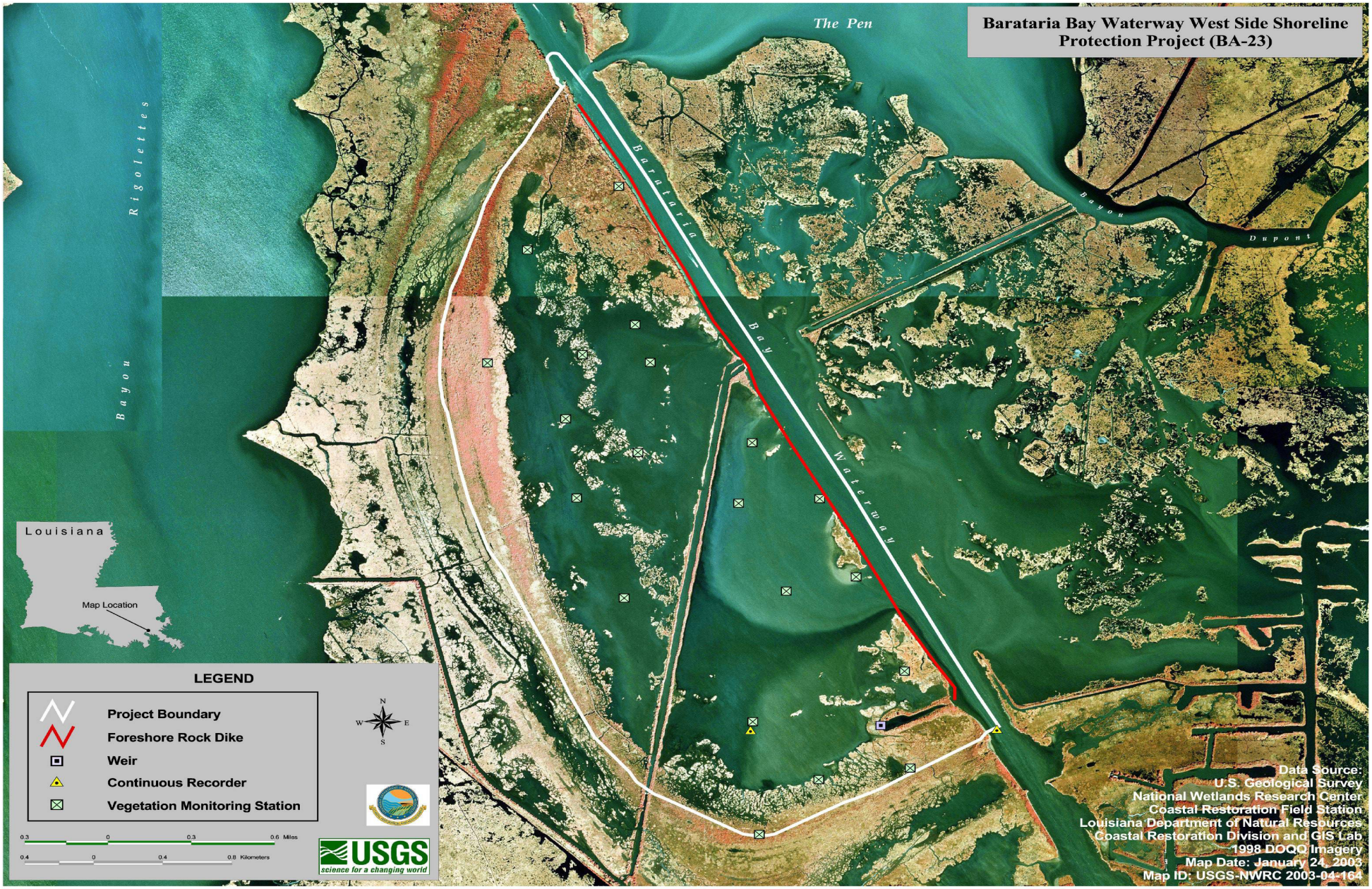
Programmed Maintenance

- Continue to check the water control structure during operational procedures.
- Continue to observe rock structure for settlement.

Appendix A

Project Features Map

Annual Inspection Report
Barataria Bay Waterway West Bank Protection
State Project No. BA-23



Appendix B

Photographs

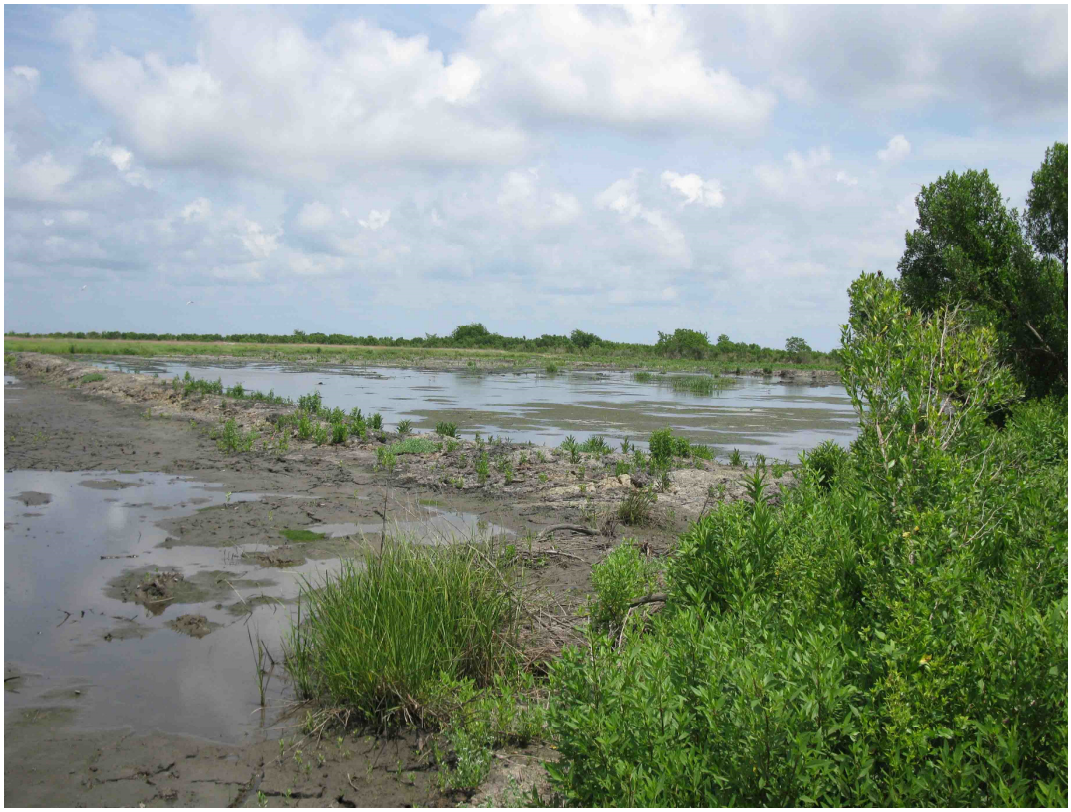


Photo #1 – Well Dredge Marsh Creation

Photo #2 – Note low spot on left.

Appendix C

Three Year Budget Projection

Annual Inspection Report
Barataria Bay Waterway West Bank Protection
State Project No. BA-23

Barataria Bay Waterway West Bank Protection (BA-23)
Federal Sponsor: NRCS
Construction Completed : 11/7/2000
PPL 4

Current Approved O&M Budget June 2009	Year 0 FY01	Year - 1 FY02	Year -2 FY03	Year -3 FY04	Year -4 FY05	Year -5 FY06	Year -6 FY07	Year -7 FY08	Year -8 FY09	Year -9 FY10	Year -10 FY11	Year -11 FY12	Year -12 FY13	Year -13 FY14	Year -14 FY15	Year -15 FY16	Year -16 FY17	Year - 17 FY18	Year -18 FY19	Year -19 FY20	Project Life Budget	Currently Funded
State O&M																					$746,260	$746,260
Corps Admin																					$0	$0
Federal S&A																					$0	$0
Total																					$746,260	$746,260

Projected O&M Expenditures																					Remaining Project Life	Current 3 year Request
Maintenance Inspection												$3,614	$3,708	$3,804	$3,903	$4,005	$4,109	$4,216	$4,325	$4,438	$36,122	$11,126
General Maintenance																					$0	$0
Operations												$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	$18,000	$6,000
Surveys														$65,000							$65,000	$65,000
Sign Replacement																					$0	$0
Federal S&A																					$0	$0
Maintenance/Rehabilitation																					$0	$0
E&D															$12,000						$12,000	$0
Construction															$300,002						$300,002	$0
Construction Oversight															$75,001						$75,001	$0
Total												$5,614	$5,708	$70,804	$392,906	$6,005	$6,109	$6,216	$6,325	$6,438	$506,125	$82,126

Notes:

1. The year-by-year figures for the current Approved O&M Budget are based on the BEAST approved at the 6/3/09 Task Force meeting. This spreadsheet was a correction to the BEAST submitted for theFall 2008 funding requests.

O&	
Sta	
Federal Sponsor MIPRs (if applicable)	$0
Total Estimated O&M Expenditures (as of April 2010)	$513,773

Current O&M Budget less COE Admin	$746,260
Remaining Available O&M Budget	$232,487
Incremental Funding Request Amount FY12-FY14	**-$150,361**

Current Project Life Budget less COE Admin	$746,260
Total Projected Project Life Budget	$1,019,897
Project Life Budget Request Amount	**$273,637**

Appendix D

Field Inspection Form

Annual Inspection Report
Barataria Bay Waterway West Bank Protection
State Project No. BA-23

MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No. / Name: **BA-23 Barataria Waterway (West) Shoreline Protection** Date of Inspection: 4/21/2011 Time: 9:30 am

Structure No. _____ Inspector(s): Richard, Kinler, Trusclair

Structure Description: _____ Water Level Inside: N/A Outside: 0.80'

Type of Inspection: Annual Weater Conditions: Partly Cloudy, Moderate Wind

Item	Condition	Pysical Damage	Corrosion	Photo #	Observations and Remarks
CMP culverts	Good	None	None		
Weir Bays - logs locks, hoist, supports	Good	None	Some		Some stop logs need repairs and /or replacement.
Handrails Grating Hardware etc.	Good	None	None		
Timber Piles	Good	None	None		
Timber Wales	Good	None	None		
Galv. Pile Caps	Good	None	None		
Signage /Supports	Good	None	None		
Riprap	Good	None	None		
Silt/Fill	Fair	None	None		The area in front of the Water Control Structure access canal is silting in.
Foreshore Rock Dike	Good	None	None		

Position of stoplogs at the time of the inspection? Out
Are there any signs of vandalism? No
Conditions of existing levees? Good
Settlement of rock plugs and weirs? Minor, continue to observe
Noticable breaches? One, not significant, man made.